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March 18, 1993

92-260

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Donna R. Searcy
Secretary
The Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

Dear Ms. Searcy:

Enclosed are reply comments and other comments related to certain proceedings before the FCC and in some cases following action by the FCC.

The intent here is not to reply to or comment on the entire subject docket but rather to offer what should be considered as related commentary on specific points for consideration by the FCC.

Specifically:

1. We offer remarks in connection with "Compatibility between cable systems and consumer electronic equipment."

2. Cable Home Wiring, Docket 92-260. This matter has been resolved by Report and Order, but the comments herein also can apply directly to that situation, particularly in case there is any need for consideration in the future.

The attached comments are respectfully submitted.

Very truly yours,

O. D. Page, P.E.

ODP/pg

cc w/attachments: The Honorable: Alfred C. Sikes, Chairman
James H. Qeullo
Sherrie P. Marshall
Andrew C. Barret
Ervin S. Duggan

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List A B C D E

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

Compatibility Between Cable Systems
and Consumer Electronic Equipment

Comments due March 22, 1993; Reply Comments April 21, 1993

Docket No. 263?

and

Disposition of In-Home Wiring
(Prior ruling by the FCC)

Docket No. 263?

INTRODUCTION

The problem of compatibility of consumer equipment with cable television system equipment has existed as long as converters have existed in the cable industry. The matter has been addressed on a number of occasions by the EIA and again later by the EIA in cooperation with the NCTA.

The problem has not been resolved. The cause of the problem is the fact that a fairly complicated electronics box is placed inside the home of the subscriber by the cable company for the purpose of decoding and selecting channels for viewing purposes. These boxes have reached a cost of some $200 per home, and in the future are expected to increase to perhaps as much as $300 per home with the advent of digital compression and channel multiplication. They are not compatible with, and defeat many functions of, millions of television sets and VCRs.

Something needs to be done about it: **get those boxes outside the home**!

Discussion: Several companies over the years, beginning with a Canadian company called Delta, utilizing an invention by Stern Communications called an "Addressable Wall Tap" have attempted to replace the converters that have been placed in the homes of the subscribers. Removing the hardware from the homes of the subscribers will have almost essential advantages:

1. The cost of losses and damages to boxes will be reduced or eliminated.

2. Piracy will be much easier to control and may even come close to being non-existent. The problem now with piracy is that (1) the box that is sitting on top of the TV set must cost a reasonable amount of money in order not to damage the profits of the cable company, so (2) it is not sufficiently complicated such as to defeat efforts of so-called "electronic geniuses" (called "hackers" in the computer industry) from developing modifications and/or substitutions for this box and selling them for illegal use.

The present system of enforcing piracy provisions probably involves some illegal acts on the part of government enforcement agencies, aided and abetted by certain cable operators and manufacturers. Truly legal equipment is being seized in the name of the Piracy Act, thus in some cases forcing legitimate manufacturers and suppliers out of business, without due process.

Solution: The solution is a system that controls the services from outside the home so that only those services that are being paid for will be accessible to the cable operator. This may be a "box" attached to the side of the individual home; it may be a "box" which hangs on the cable strand and feeds the required channels through the drop, in response to signals sent to the box by an inexpensive ($10 or so) keypad.

Such a concept is not at all an innovation. The problem is that the cable industry for one reason or other has not embraced this concept, and manufacturers have not given the matter the kind of attention that would have been given if the interests had been, say, as high as that in the recently-being-implemented digital signal compression techniques.

The problem with external control of the signals is the same problem that the telephone company had in the Carterfone Case. The Carterfone Case was fought in court for some 20 years at considerable expense to the telephone companies, solely because the profits to be made in incremental charges inside the home and in the monopolistic control of the equipment rented to the subscribers were such as to justify legal expenses even higher than those that were incurred.

Fortunately the Carterfone Case prevailed. However, in this case, and in another docket which has already been decided, unfortunately, the cable industry has managed to keep some level of control of the distribution and rental of the boxes that must be used in the home.

It is certainly true that considerable loss of (excessive) revenue would result if the cable industry were required to remove their equipment from the subscribers' homes, not charge for extra boxes, extra TV hook-ups, etc. — as is indeed the case in respect to telephone service.

Be not convinced that there is any good reason for not allowing or requiring the subscriber to own and maintain the equipment inside the home. The claim of "responsibility" for radiation performance is specious at best. Consider:

1. While the in-home cable is in operation, the operator has the authority to enforce the requirement for performance of that cable, not only for radiation, but for all other purposes. The cable operator also has the authority to charge the subscriber for any repairs necessary inside the home. This might represent some income to the cable operator, but what will happen will be exactly what has happened in the telephone industry: contracting companies will be formed who will provide this kind of inside wiring services — and at considerably less cost than do the cable companies. Thus, again, it is clear that the cable companies are concerned about their losses in revenue.

2. On the other hand, if the in-home wiring is not being supplied from the cable operator, but is being supplied by someone else, **then it is no longer the responsibility of the cable operator**; the new supplier, together with the subscriber will be responsible for that performance.

It is, accordingly, difficult to understand why, from an informed technical standpoint, that the same ruling could not have been made in terms of the in-home cable wiring as was made in Carterfone Case.

SUMMARY

1. Compatibility between cable equipment and consumer equipment can be resolved in one fairly-easy move, once the cable industry (e.g., Cable Labs) addresses itself to the real goal of developing off-premises equipment (this is referred to as "interdiction" equipment these days). It would not even be necessary for the cable operator's personnel to be inside the home (think about the reduced number of complaints, for example, caused by service people tracking mud in on the rugs!). The techniques and technology are in place for doing this. Scientific Atlanta is offering a product line which they refer to as their interdiction equipment, and it is being used with some degree of success in the industry — perhaps the only lack of "success" as far as the cable industry is concerned, is the threat of reduced revenue from subscribers who cannot go any place else to get this service.

   It almost a certainty that the cable operator would have to raise his rates to some degree to offset this loss of revenue, but the net result would be a gain for everybody concerned, because the cable operator could still derive his 50 or 55% operating margin and charge lower overall rates to his subscribers, and provide much improved service.

THE WASHINGTON POST

MICHAEL SCHRAGE

B4 FRIDAY, FEBRUARY 12, 1993

It's Time for Viewers to Get Control of Their Cable TV Converter Boxes

Sure, 500 channels might be fun, but do they really get you the best bang for your cable TV buck? Don't you and your family also want better services for less money?

Then don't just re-regulate the cable industry. Deregulate the cable TV converter box.

Only in America can you own your own TV set, telephone, personal computer, CD player and VCR but be legally prohibited from owning the cable TV converter box that sits in your living room. It's time to tell the cable companies that it's your living room, not theirs.

With virtually every media technology but that cable converter, you get an excellent array of price and choice. Why? Because they are the result of a competitive marketplace that rewards innovation and low-cost manufacturing. The cable converter, by contrast, is the feeble spawn of the pseudo-monopoly. It's designed with the convenience of the cable company—not the consumer—in mind.

"Let a thousand converter boxes bloom," former Federal Communications Commission Chairman Mark Fowler agrees. "This makes good policy sense: It would let consumers choose the box that's best for them. . . . Right now, we have a monopoly cable provider dictating what the box is."

To be sure, deregulating cable converter boxes shouldn't become a sneaky way for people to illegally hook up to cable services, any more than buying a telephone entitles you to free long-distance calls.

What's so provocative, however, is that it might well be in the best economic interest of the cable companies to give up their virtual monopoly on converter boxes. Subscribers who only care about changing channels could buy the cheap converters made in Indonesia; those who want to play video games, retrieve movie snippets and do home banking could buy the top-of-the-line multimedia converters built by Apple Computer Inc., International Business Machines Corp. or Nintendo Co.

Indeed, just as AT&T discovered that more telephones meant more people making calls, cable companies might find that more people might subscribe to more services if there were a greater variety of innovative converters.

Don't forget that the cable companies still get to control what programming comes down their cable. So long as they can protect the integrity of their signals, who cares who owns the box? Cable companies should publish the technical specifications that make open-architecture cable converter boxes possible.

"It would seem to me that this would be a very smart thing for them to do," says Robert LaBlanc, a Tribune Co. director and former vice chairman of Continental Telecom Inc., now Contel Corp., who occasionally consults for cable companies. "It would promote competition and the faster introduction of new services. . . . I think the FCC ought to open up hearings on this."

The cable establishment, on the other hand, is something less than enthusiastic. "Unlike the Bell system," National Cable Television Association spokeswoman Peggy Laramie says, "cable is not a common carrier. . . . Complete and open access does not fit with the heritage of cable."

"While we do not react with revulsion to this notion, we'd oppose it," says Robert Thomson, senior vice president of Tele-Communications Inc., the nation's largest cable company. "Until this rapidly evolving environment is worked through by private industry, it's too soon to set any timetables for standards or deregulation." Thomson insists that market forces could bring about de facto converter deregulation so that government action is unnecessary.

Other cable companies seem more sanguine. "So long as we are able to own the unscrambling circuits," it doesn't much matter who owns the rest of the box, says Walt Ciciora, vice president of technology for Time Warner Cable. Indeed, Ciciora notes, Time Warner also is talking with companies such as Apple Computer about the future blend of computers and converters.

Of course, there are technical issues to be ironed out. But the fact is that the Cable Act of 1992 doesn't go far enough in encouraging a vibrant market in this growing technological arena. The next FCC chairman should do right by consumers, the cable companies and U.S. electronics companies by setting converters free.

Michael Schrage is a columnist for the Los Angeles Times.